

NOTES ON CHINESE PANORPIDÆ
(MECOPTERA)¹

BY F. M. CARPENTER
Harvard University

Panorpa dicerias was described by McLachlan in 1894 from Szechuan, China. Lack of knowledge of the genital structures of the male type, which has been in private hands and inaccessible for many years, has prevented recognition of the species, though both Dr. Tjeder and I attempted it. Acquisition of the McLachlan collection by the British Museum (Natural History) in 1938 has finally made the type available for study, and in reply to my request for information about it, Mr. D. E. Kimmins very kindly sent me two drawings, which enable recognition of the insect. Since it is now apparent that both Dr. Tjeder and I have misidentified *dicerias*, I include here an account of its structure and of the taxonomic changes involved.

Panorpa dicerias McL. (Fig. 1)

Panorpa dicerias McLachlan, 1894, Ann. Mag. Nat. Hist., 13: 423 (*nec P. dicerias* Tjeder, 1935, Arkiv för Zoologi, 27A(33): 7; *nec P. dicerias* Carpenter, 1938, Proc. Ent. Soc. Wash., 40: 270).

Panorpa grahami Carpenter, 1938, Proc. Ent. Soc. Wash., 40: 272, figs. 5, 9.

The drawings of the genital bulb of the type sent by Mr. Kimmins are reproduced in the accompanying figure. A comparison of these with Dr. Tjeder's illustrations of his species, and with my drawings (1938) of the supposed *dicerias* reveals obvious differences, especially in the form of the hypovalvæ and ventral valves. On the other hand, comparison with my figures of the genitalia of *grahami* leaves no doubt of the identity of this species with *dicerias*. In other details of body structure, as well as wing coloring, *grahami* also agrees with Mc-

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Lachlan's account of *dicerus*. It is significant that the type of *grahami* was collected only a few miles from Tachienlu, the type locality of *dicerus*. My failure in 1938 to recognize the specimen of *grahami* as *dicerus* was due to an incorrect interpretation of McLachlan's description of the hypovalvæ.

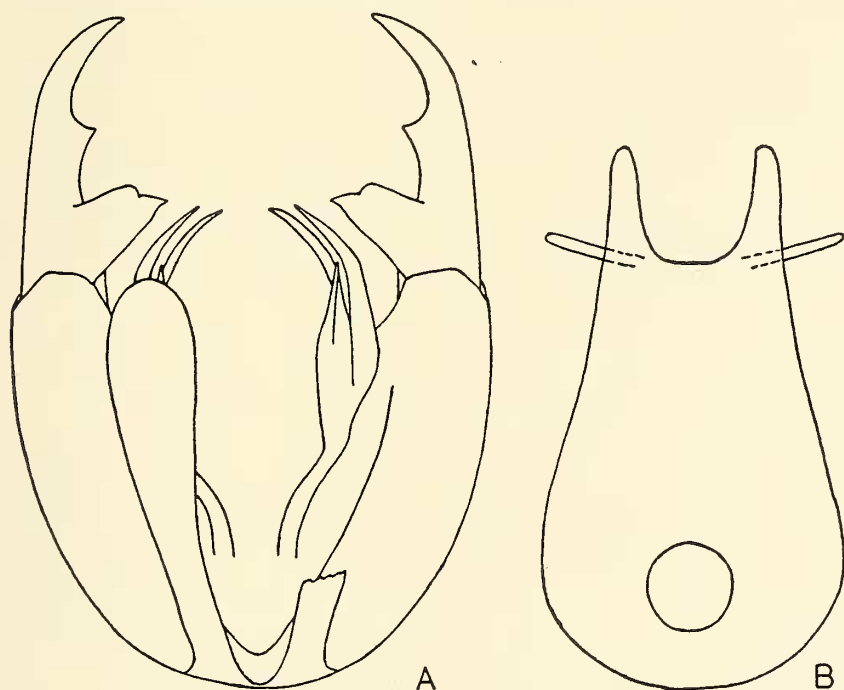


Fig. 1. *Panorpa dicerus* McLachlan. A, ventral view of ♂ genital bulb, drawn from type in the British Museum (Natural History) by D. E. Kimmins. B, preëpiproct of same specimen.

I have already (1938, p. 271) proposed a new name (*tjederi*) for the species which Tjeder identified and described as *dicerus*. The following is a description of the species which I originally identified as *dicerus*:

***Panorpa kimminsi*, n. sp.**

Panorpa dicerus Carpenter, 1938, Proc. Ent. Soc. Wash., 40: 270, fig. 2, 10, 11 (*nec P. dicerus* McLachlan, 1894).

The genital bulb of the male and the internal skeleton of the genital segment of the female have already been described and figured in the paper mentioned above, so I add here only an account of the rest of the body and the wings: Body yellow, with black in the region of the ocelli and between the antennal bases; also, a black stripe

along each side of the rostrum; eyes gray-brown; thorax and abdomen yellow, with a black stripe laterally, sixth abdominal segment of male with a pair of short posterior horns, as in *diceras*. Fore wing: length 15–18 mm.; width, 4 mm.; wing membrane dusky hyaline, with greyish yellow at apex; pterostigma yellow.

Holotype (♂): Omei (11,000 ft.), Szechuan, China, July, 1936 (D. C. Graham); in the U. S. National Museum. This is the specimen which I illustrated under the name *diceras* McL. in 1938, figures 2 and 10.

Allotype (♀): near Tachienlu (5000–8500 ft.), Szechuan, China, June 18–July 12, 1923 (D. C. Graham); in U. S. National Museum. This specimen was illustrated in the same paper (1938), figure 11.

Paratypes: 1 ♂, Suifu, Szechuan, China, Oct. 1, 1929 (D. C. Graham); in U. S. National Museum. 1 ♀, west of Yachow (2000–7500 ft.), Szechuan, China, June 14–18, 1922 (D. C. Graham); in U. S. National Museum. 1 ♂, same collection data as last, in Museum of Comparative Zoölogy. 1 ♀, same collection data as allotype, in U. S. National Museum. 2 ♀, 9 miles southwest of Tachienlu (9000–11,000 ft.) Szechuan, China, June 25–27, 1923; in Museum of Comparative Zoölogy.

There is an additional female, in poor condition and not designated a paratype, from 30 miles north of Tachienlu, Szechuan, 12,000 ft., July 5–9, 1923 (D. C. Graham).

This species, which I have named for Mr. D. E. Kimmins of the British Museum (Natural History), belongs to the *diceras* group of *Panorpa*, but differs from the other species included there by the curved forceps and peculiar configuration of the ventral valves of the male.